



#### United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,581	01/25/2000	Shigeto Igarashi	2811	8717
7:	590 03/13/2002			
Law Office of David O'Reilly 1800 Bridgegate Street #200			EXAMINER	
			VU, NGOC YEN T	
Westlake Village, CA 91361				
			ART UNIT	PAPER NUMBER
			2612	
			DATE MAILED: 03/13/2002	6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/491,581

Applic (s)

Shigeto IGARASHI

Examiner

Ngoc-Yen VU

Art Unit **2612** 



The MAILING DATE of this communication app	ears on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS THE MAILING DATE OF THIS COMMUNICATION.	SET TO EXPIRE 3 MONTH(S) FROM
- Extensions of time may be available under the provisions of 37 CF	
after SIX (6) MONTHS from the mailing date of this communical - If the period for reply specified above is less than thirty (30) days, a	a reply within the statutory minimum of thirty (30) days will
be considered timely.  - If NO period for reply is specified above, the maximum statutory pe	eriod will apply and will expire SIX (6) MONTHS from the mailing date of this
communication.  - Failure to reply within the set or extended period for reply will, by st	atute, cause the application to become ABANDONED (35 U.S.C. § 133).
<ul> <li>Any reply received by the Office later than three months after the n earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	nailing date of this communication, even if timely filed, may reduce any
Status	
1) X Responsive to communication(s) filed on	5, 2000
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under E	e except for formal matters, prosecution as to the merits is ix parte Quayle35 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-16</u>	jé/are pending in the applica
	is/are withdrawn from considera
5)  Claim(s)	is/are allowed.
6) ☑ Claim(s) <u>1-16</u>	/s/are rejected.
	is/are objected to.
8) 🗌 Claims	are subject to restriction and/or election requirem
Application Papers	
9) X The specification is objected to by the Examiner.	
10) The drawing(s) filed on	is/are objected to by the Examiner.
11) The proposed drawing correction filed on	
12) The oath or declaration is objected to by the Exar	
Priority under 35 U.S.C. § 119	
13) 🗓 Acknowledgement is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d).
a)⊠ All b) ☐ Some* c) ☐None of:	
1. X Certified copies of the priority documents ha	ave been received.
2.  Certified copies of the priority documents ha	ave been received in Application No
application from the International Bur	
*See the attached detailed Office action for a list of the state of th	
THIS PROGRAMME AGENT OF THE METERS	is priority under 50 0.0.0. 3 115(c).
Attachment(s)	
15) X Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) X Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20)

Art Unit: **2612** 

#### Information Disclosure Statement

1. The information disclosure statements, paper No. 2 and 4 filed on 06/02/2000 and 05/17/2001, have been placed in the application file, and the information referred to therein has been considered as to the merits.

#### **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Claim Objections

4. Claims 1, 4 and 14-16 are objected to because of the following informalities:

<u>Claim 1</u>: the term "amplification of the degree" and "the amplification degree" have been interchangeable used. It is suggested that a common term to be used.

<u>Claim 4</u>: line 4, change "the output voltage" to --the video output voltage--.

Claim 14: line 3, change "of an automatic gain" to --and an automatic gain--.

Claim 15: line 2, insert --an-- before "existing AGC amplifier"

Art Unit: 2612

<u>Claim 16</u>: line 3, insert --a-- before "signal level output voltage--.

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 4-7 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the video output voltage" and "the processing circuit" in lines 5 and 6, respectively. There is no antecedent basis for these limitations in the claim.

Claim 4 recites the limitation "the signal level" in line 4. There is no antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the output voltage" and "the signal level" in line 4. There is no antecedent basis for these limitations in the claim.

Claim 6 recites the limitation "the output voltage" and "the signal level" in line 4. There is no antecedent basis for these limitations in the claim.

Claim 7 recites the limitation "the video output voltage" in lines 5-6. There is no antecedent basis for this limitation in the claim.

Application/Control Number: 09/491,581

Art Unit: 2612

Claim 13 recites the limitation "the video output voltage" in line 4. There is no antecedent basis for this limitation in the claim.

Page 4

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 4, 7 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyagi et al. (US #5,652,925).

Regarding claim 1, Aoyagi '925 teaches a signal amplifying circuit for a CCD camera comprising an auxiliary amplifying circuit (AMP 4 and gain switching component 5) m, the amplification degree of the auxiliary amplifying circuit being raised according to necessity so as to maintain a video output voltage at a predetermined voltage and vary the amplification degree of the processing circuit to broaden the range for photographing (col. 5 line 11 - col. 7 line 18).

As to claim 4, Aoyagi teaches a detecting means (accumulation time interval calculating component 6) to detect a change of object illumination, and detecting the video output voltage in the signal amplifying process (col. 5 line 11 - col. 7 line 18).

Regarding claim 7, Aoyagi '925 teaches a signal amplifying circuit for a CCD camera comprising an auxiliary amplifying circuit (AMP 4 and gain switching component 5) m, said

Art Unit: 2612

auxiliary amplifying circuit constructed to increase the amplification during low light levels to maintain a video output voltage at a predetermined voltage, and vary the amplification degree of the processing circuit to broaden the range for photographing (col. 5 line 11 - col. 7 line 18).

Regarding claim 13, it is a method claim corresponding to the apparatus claim 1.

Therefore, claim 13 is analyzed and rejected as previously discussed with respect to claim 1.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2-3, 5-6, 8-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al. (US #5,652,925) in view of Kondo et al. (US #5,053,877).

Regarding claims 2-3, Aoyagi '925 teaches a signal amplifying circuit for a CCD camera comprising an auxiliary amplifying circuit (AMP 4 and gain switching component 5) m, the amplification degree of the auxiliary amplifying circuit being raised according to necessity so as to maintain a video output voltage at a predetermined voltage and vary the amplification degree of the processing circuit to broaden the range for photographing (col. 5 line 11 - col. 7 line 18).

Art Unit: **2612** 

Claims 2 and 3 differ from Aoyagi in that the claims further require two AGC circuits each having high/low S/N ratio and low/high amplification degree, respectively, and a switch for switching between the AGC circuits. The limitation is well known in the art as shown in Kondo. In the same field of endeavor, Kondo '877 teaches an AGC circuit for use in an electronic CCD camera comprising an automatic gain control circuit (5), and a switch (32) for switching between low amplification degree and high amplification degree for the AGC (5) (col. 5 line 35 - col. 8 line 50). In light of the teaching from Kondo, it would have been obvious to one of ordinary skill in the art to modify the signal amplifying and processing circuit taught in Aoyagi by providing two AGC circuits having low and high amplification degree so as to allow the signal amplifying and processing circuit to selectively amplify the signal level providing high quality image signals.

As to claims 5-6, Aoyagi teaches a detecting means (accumulation time interval calculating component 6) to detect a change of object illumination, and detecting the video output voltage in the signal amplifying process (col. 5 line 11 - col. 7 line 18).

As to claims 8-9, the subject matter in these claims can be found in claims 2-3.

As to claims 10-12, the subject matter in these claims can be found in claims 5-6.

As to claims 14-15, the subject matter in these claims can be found in claims 2-3.

As to claim 16, the subject matter in these claims can be found in claim 5.

#### Conclusion

8. Any response to this office action should be mailed to:

Art Unit: 2612

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ngoc-Yen Vu** whose telephone number is (703) 305-4946. The examiner can normally be reached on Mon - Fri from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reached on (703) 305-4929.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-0377.

NYV 03/10/2002

Patent Examiner

Group Art Unit 2612